

13 November 2019

17074

Mr Matthew Miles
Senior Town Planner
Hornsby Shire Council
296 Peats Ferry Road
HORNSBY NSW 2077

Dear Matthew,

DA/1227/2018 – Planning Panel – Loreto Normanhurst Early Learning Centre

We write on behalf of the proponent Loreto Normanhurst, in relation to the Development Application (DA) DA/1227/2018 for an Early Learning Centre (ELC) at 91 – 93 Pennant Hills Road and 6 Mount Pleasant Avenue, Normanhurst.

This letter and accompanying documentation seek to respond directly to the issues raised at the Sydney North Planning Panel (the Panel) meeting on 11 September 2019 and Council on 1 October 2019.

Loreto Normanhurst and the project team has considered and responded to the traffic and safety issues raised by the Panel and the Stormwater Quality clarification raised by Council. This response should be read in conjunction with the following supporting documentation:

- Response to Deferral Decision, Traffic and Transport Letter prepared by Ason Group dated 13 November 2019 (**Attachment A**);
- ELC Parking Strategy, SK191112, prepared by AJ+C (**Attachment B**); and
- MUSIC-Link report for the site and corresponding MUSIC model, prepared by Taylor Thomson Whiting, dated 4 October 2019 (**Attachment C**).

1.0 Panel Meeting

At the Panel meeting on 11 September 2019, issues were raised regarding the operation of the current school facilities on the road safety and immediately adjoining road network.

The Panel acknowledged that the proposed ELC may comply with the required parking requirements and that it operates in a wider morning and evening peak than the school. However, the Panel was concerned that an additional impact on the operation of the road network, even if only minimal, may be unacceptable and that the cumulative effect of the existing and any proposed needs to be addressed.

The Panel deferred the determination and requested the applicant to submit a traffic management plan which addresses the issues raised in the meeting. These issues are addressed below.

The applicant's traffic consultant Ason Group, prepared a comprehensive response to the Panel's issues (refer to **Appendix A**), which incorporated two key pieces of work to support the response including:

- Drone surveys (taken in September 2019) of the intersections of Osborn Road and Mount Pleasant Avenue with Pennant Hills Road; and
- Road Safety Audits (RSA) of the existing conditions on Osborn Road and Mt Pleasant Ave to highlight any existing potential road safety concerns.

2.0 Consideration of widening Osborn Road to ease Traffic Flow

The potential to widen Osborn Road in the vicinity of its intersection with Pennant Hills Road was a suggestion raised by the Panel to create additional capacity for vehicles leaving Osborn Road (i.e. additional left / right / through lanes from Osborn Road).

The drone surveys demonstrated only minor queueing in both the AM and PM peak periods on Osborn Road . Whilst some queueing was observed during the peak morning and evening pick-up times, the videos demonstrate that these queues clear under each intersection cycle. The maximum number of vehicles observed existing at any time from Osborn Road under each cycle was some 9 vehicles. The peak observed times were between 8:17-8:33am in the morning peak and 3:10-3:25pm in the afternoon peak.

The drone survey results validate the SIDRA analysis undertaken by Ason Group, which found that the intersection was operating with a good Level of Service (LOS B), with acceptable delays and spare capacity. The drone surveys and SIDRA analysis confirm that physical widening Osborn Road is not warranted for the ELC given the minor increase in traffic generation of 20-25 vehicles on Osborn Road and Mt Pleasant Ave.

The surveys did however identify a simple improvement that can be made to improve the intersection operation. It was demonstrated that a section of existing on site parking within Osborn Road on the eastern side does impact the ability of vehicles (notably for buses) to merge into the left-hand lane during peak periods (**Figure 1** and **Figure 2**).



Figure 1 Osborn Road On street parking



Figure 2 Osborn Road On-street Parking

It is now proposed to remove the on street parking spaces close to the intersection with Pennant Hills Road, to improve the traffic flow in Osborn Road, refer to **Figure 3**, subject to confirmation with Council. This is considered an appropriate remedy to the request to explore road widening opportunities by the panel.



Figure 3 Osborn Road On-street Parking to be Restricted

3.0 Consideration of widening the existing or altering the access points to the school in both Osborn Road and Mount Pleasant Avenue

The Panel requested the applicant consider widening the existing or altering the existing access points to the school on Osborn Road and Mt Pleasant Ave. The Road Safety Audit (RSA) reviewed the existing access points to Loreto Normanhurst.

The RSA found that vegetation impacted on the visibility of drivers exiting the site which may increase the risk of vehicle pedestrian crashes, particularly at Gates 1, 2 and 4 on OR. Simple measures such as pruning, maintaining vegetation, providing Stop signs and convex mirrors are methods which will be utilised to improve the safety at the access points of Loreto Normanhurst as detailed below. Furthermore, it is important to note that the school gates and entry points are being reviewed as part of the Master Plan works.

3.1 Osborn Road Access Points

Gate O1

Gate O1 functions as a joint inbound and outbound gate to the school. The RSA found that outbound drivers would have limited visibility to pedestrians on the eastern footpath of Osborn Road, due to the vegetation either side of the driveway. The limited visibility may increase the risk of *vehicle pedestrian* crashes, particularly since the footpath is likely to be used by school children, including persons of shorter stature. The majority of the issues involve improved maintenance to the landscaping with some additional signage and convex mirrors to improve sightlines and Loreto proposes the following:

- Trimming the vegetation and hedges to a lower height. The un-shape-able trees can be “thinned out” to improve see through visibility;
- Provision of STOP signs and a stop hold line; and
- Provision of convex mirrors.

Gate O3

The RSA found that outbound drivers from Gate O3 of Loreto Normanhurst would need to check for gaps in the northbound and southbound traffic streams of Osborn Road. This requires drivers to look to left (south) and right (north). There is limited *minimum gap sight distance* (MGSD) to the south due to a large tree.

To address this Loreto will modify the existing landscaping by clearing out the understorey layer of low level trees and plants.

Gate O4

Outbound drivers from Gate O4 would need to check for gaps in the northbound and southbound traffic streams of OR. This requires drivers to look to the left (south) and right (north). There is limited *minimum gap sight distance* (MGSD) to the south due to a cluster of trees. The driver is unlikely to have a clear view to northbound traffic and may not be able to judge suitable gaps. This could lead to poor gap selection and consequential cross traffic crashes. Alternatively, a common response is for drivers to “creep” out into the roadway to improve their sightline. This would leave them exposed to impacts by southbound vehicles when stopped in such a position.

To address this the MGSD sight lines will be improved through tree pruning works.

In addition to the above measures, the access points into Loreto Normanhurst are all being reviewed as part of the State Significant DA Master Plan currently being considered by Department of Planning, Industry and Environment. As part of the Master Plan works the left-turns into the site are to be reviewed.

4.0 Assessing the traffic issues for the full length of both Mount Pleasant Avenue and Osborn Road

The Panel requested that the traffic issues be assessed for the full length of both Osborn Road and Mt Pleasant Ave. As outlined above RSA of the existing conditions on Osborn Road and Mt Pleasant Ave were undertaken by DC Traffic Engineering to highlight any existing potential traffic issues.

The Osborn Road RSA included a number of suggestions which should be considered by Council and RMS, such as and the removal of the left turn on red permitted after stopping at the Osborn Road / Pennant Hills Road intersection, footpath improvements works, tree pruning, relocating traffic signs, re-installment of pavement markings and review of the permitted left-turn on red, refer to **Appendix A** and **Table 1**.

The RSA also found that the key issue identified for Mt Pleasant Ave was the concern with the permitted right-turns. Signage restricting the right-turn will be implemented as part of the ELC development and therefore will resolve this key issue. Tree pruning works, where possible would be undertaken by the School. Many of the other items suggested are recommended to be considered by Council / RMS, such as repairing potholes, tree pruning on public land, relocation of traffic signs and installation of pavement markings, refer to **Appendix A** and **Table 2**.

Loreto Normanhurst will work with both agencies to accommodate the recommendations where possible which are detailed below .

Table 1 Osborn Road Assessment

Comment	Response
<p>Comment: the combined effect of the curvature of this road, and overhanging tree foliage on the inside (northern) side of the curve have affected the sight distance</p> <p>Suggestion: Driver visibility to the primary signals could be improved by pruning</p>	Any works to foliage and signage on the public roadway need to be undertaken by the asset owner (RMS and / or Council). The School will place maintenance requests for tree pruning works.
<p>Comment: A dynamic flashing light unit has been provided to alert westbound drivers of the traffic signals in the road ahead... the flashing light unit is not optimally positioned.</p> <p>Suggestion: if the flashing light unit was relocated...As such, the flashing light unit would be more meaningful as the driver would receive both advanced warning messages at the same time.</p>	As above, any works to the public roadway need to be undertaken by RMS and / or Council. The RSAs will be provided to RMS for their review.
<p>Comment: The northbound left-turn movement from Osborn Road to Pennant Hills Road contains LEFT TURN ON RED PERMITTED AFTER STOPPING signs (LTOR rule). This does not appear to be appropriate for a left-turn onto Pennant Hills Road, as a major and high-volume arterial route.</p> <p>Suggestion: With minor adjustment works to include red arrow aspects, the left-turn movement to Pennant Hills Road West could easily become fully controllable, and adaptive to differing traffic conditions of the day. The adjusted signal hardware and phasing may also be able to replace the LTOR rule such that there are no longer any uncontrolled left-turn movements.</p>	<p>Any alterations to the phasing of the signals are the responsibility of RMS. However, it is noted that the safety concern raised has regard for uncontrolled left-turns onto the high-volume Pennant Hills Road.</p> <p>As recorded by the drone survey, this intersection is operating safely and efficiently and therefore, Ason Group does not deem the suggestion to change the phasing of the signals to be required at this stage, however it open to review by RMS and Council.</p>
<p>Comment: The Osborn Road southbound departure from Pennant Hills Road is narrow.</p> <p>Suggestion: There are very few easy solutions to addressing these issues. However, if larger scale improvements are considered along Osborn Road, then consideration could also be given to widening works to improve lane and road widths, as well as safety on footpaths.</p>	<p>As noted, the only way to overcome this issue is to widen Osborn Road, which would require significant works and is not warranted for the minor increase in traffic associated with the ELC..</p> <p>As demonstrated within the drone surveys the restriction of a section of parking is instead proposed which will effectively improve the operation of the southbound departure lane on Osborn Road. This is proposed to be implemented as part of the works.</p>
<p>Comment: There are several signs along the audited length of Osborn Road which are visually obscured by tree foliage.</p> <p>Suggestion: These are generally mitigatable by tree pruning works.</p>	Pruning works on trees which overhang the School property boundary are to be undertaken by the School. As noted above, any works to public land are the responsibility of the asset owner, so a request will be made to Council to prune the trees on public land.
<p>Comment: Pennant Hills Road/Osborn Road intersection – opposing right-turn visibility constraints.</p> <p>Suggestion: Increased controls on the right-turn movements could be considered including full control (non-filtered turns), part-day controls, or leading right-turn phases.</p>	<p>The concerns raised are with regard to opposing right turns at the Pennant Hills Road / Osborn Road signals. As discussed under Ref 3. the drone surveys and modelling analysis to date has illustrated that these signals operate efficiently and safely and therefore it is not Ason Group's recommendation to review the phasing at this time.</p> <p>Nevertheless, the RSA will be made available for RMS review and consideration.</p>

Comment	Response
<p>Comment: The 40k pavement patches associated with the start of the school zone have faded.</p> <p>Suggestion: The pavement markings should be re-instated to improve the prominence of the western gateway to the school zone.</p>	<p>This is the responsibility of RMS; as above, the RSA will be made available for RMS review and consideration.</p>
<p>Comment: In general, the audit team noted that there was a substantial volume of loose gravel and debris at the Pennant Hills Road/Osborn Road/ Normanhurst Road intersection.</p> <p>Suggestion: There is no immediately obvious source of this loose material. As such, the mitigations would tend to be reactive, such as street sweeping and maintenance.</p>	<p>As above, this is an issue for RMS to address.</p>
<p>Comment: the continued single southbound lane of Osborn Road presents several other movement restrictions along its length, particularly for the section that contains a BB double barrier centreline. As shown below, at gate O1, the limited width between the eastern kerb line of Osborn Road and the BB double barrier centreline constrains the left-turn movement into the driveway.</p> <p>Suggestion: N/A</p>	<p>This was not observed to be an issue during on-site investigations nor the drone surveys.</p> <p>Nevertheless, the access points into the School are all being reviewed as part of the Master Plan. As part of these works, the left-turns into the site would be reviewed.</p>
<p>Comment: A portion of the eastern kerb line between Gates O2 and O3 is signposted as a NO PARKING zone...drivers are permitted to stop along a kerb line signposted with NO PARKING signs provided that they are dropping off or picking up passengers...the audit team envisages that this kerb line would still be used in less formal situations.</p> <p>Suggestion: Consideration could be given to extending the NO STOPPING designation to cover this zone.</p>	<p>As above, this was not observed to be an issue during on-site investigations nor the drone surveys.</p> <p>Further, it is noted that PUDO arrangements are currently being reviewed as part of the Master Plan, with the PUDO location to be moved to the southern part of School Grounds on Osborn Road, under the Oval.</p> <p>However, this will be monitored and if required, a request would be made to Council's Traffic Committee to install NO STOPPING signs.</p>
<p>Comment: In general, the footpaths throughout the study length contained many uneven surfaces due to vertical movement in the slabs, non-flush interfaces between asphalt in-fills and concrete slabs, and loose litter and debris.</p> <p>Suggestion: N/A</p>	<p>Maintenance of footpaths is the responsibility of the asset owner (Council). Therefore, a request will be made to Council to review and repair the footpaths.</p>

Table 2 Mount Pleasant Avenue Assessment

Comment	Response
<p>Comment: Under existing conditions, eastbound right-turn movements are permitted from Pennant Hills Road to Mt. Pleasant Avenue.</p> <p>Suggestion: Consideration should be given to banning or part-day banning this movement.</p>	<p>Signage banning the right is to be installed as part of the ELC DA.</p>
<p>Comment: The Mt. Pleasant Avenue approach to its intersection with Pennant Hills Road is STOP controlled. As such, all outbound drivers are required to stop... Further to the above, right-turn movements are permitted from Mt. Pleasant Avenue to Pennant Hills Road North.</p> <p>Suggestion: Consideration should be given to banning the outbound right-turn from Mt.</p>	<p>Signage banning the right is to be installed as part of the ELC DA.</p>
<p>Comment: On the eastern side of Mt. Pleasant Avenue to the south of Pennant Hills Road, there is a NO STOPPING sign with a single-sided, north-facing arrow. As such, this allows vehicles to stop/ park along the eastern kerb line to the south of this point.</p> <p>Suggestion: the NO STOPPING sign should be relocated further south.</p>	<p>As above, any works to signage on the public roadway need to be undertaken by the asset owner (Council). It is noted that due to the low traffic volumes on Mt Pleasant Ave, this was not observed to be a concern (as shown by the drone surveys). Nevertheless, the RSA is provided as Attachment 1 for Council's review.</p>
<p>Comment: There are several signs along the audited length of Mt. Pleasant Avenue which are visually obscured by tree foliage.</p> <p>Suggestion: These are generally mitigatable by tree pruning works.</p>	<p>Any works to foliage on the public roadway need to be undertaken by the asset owner (Council). Any foliage on School property will be pruned following the outcome of this RSA.</p>

Comment	Response
<p>Comment: There is no footpath on the western side of the road along the School frontage (left-hand image). As such, any pedestrian traffic generated from the School would be forced to walk on the unpaved portions of the verge...or crossing the road to access the eastern footpath.</p> <p>Suggestion: Consideration should be given to providing a footpath on the western side of Mt. Pleasant Avenue to link into the pre-existing footpath further north.</p>	<p>With regard to the ELC, the Site is connected to the external footpath along Mt Pleasant Ave. This would assist with improving connectivity of the main School, as a pedestrian connection will be provided between the School and the ELC.</p> <p>The pedestrian connectivity of the School itself is being reviewed as part of the Master Plan. It is worthy of note again that any works to public land, such as provision of a footpath, would need to be considered by the asset owner, being Council.</p>
<p>Comment: At the southern end of the audited length of Mt. Pleasant Avenue, the kerb-bounded section of this road transitions to an un-kerbed section with an unpaved verge.</p>	<p>As above, any works to the public road need to be undertaken by the asset owner (RMS / Council).</p>
<p>Comment: In general, many driveways along this road contain trees/ shrubs either side of them and in the roadside verges of Mt Pleasant Road. The sight lines to and from several driveways were restricted due to these trees.</p> <p>Suggestion: Tree pruning/ thinning works would generally improve sight lines in these respects.</p>	<p>As above, any works to the public road need to be undertaken by the asset owner (Council). However, the foliage along the School frontage which could impede sightlines will be pruned following the outcome of the RSA.</p>

5.0 Consider introducing the masterplan solutions as part of the subject proposal.

The Panel requested the applicant to consider introducing the masterplan solutions as part of the proposal .

As outlined in **Appendix A**, the drone surveys demonstrated that the two key intersections at Mt Pleasant Ave and Osborn Road with Pennant Hills Road currently operate with good LOS and spare capacity, with the exception of the right-turn from Mt Pleasant Ave, which is to be restricted as part of the ELC DA.

It was therefore demonstrated that the net increase in traffic generation expected as a result of the ELC (which equates to 20-25 vehicles on Mt Pleasant Ave and Osborn Road) can be accommodated by the existing road network and it is not justified that additional requirements be imposed as a result of the subject development application

The RSAs have also identified a number of opportunities to improve safety, with the main recommendation that can be implemented by Loreto Normanhurst relating to the removal of the left turn on red permitted after stopping at the Osborn Road / Pennant Hills Road intersection, pruning of vegetation, relocating traffic signs, re-installment of pavement markings and, repairing pot holes, on public land. Loreto Normanhurst will work with Council and RMS to accommodate the recommendations where possible.

Furthermore, the provision of parking spaces for the ELC is in accordance with Council's DCP. However, a further additional 5 spaces are to be provided within Loreto Normanhurst Grounds to the east of the tennis courts, to further ensure all parking requirements can be accommodated on site.

Considering the net increase in traffic generation expected from the ELC can be accommodated by the existing road network the proposed RSA safety measures will help improve the safety surrounding the site, and parking is compliant with Council's DCP, therefore, introducing the masterplan solutions as part of the subject proposal is not justified or considered reasonable.

6.0 Any matters which would go to improving the existing and future traffic impact in the vicinity of which the school has a significant impact on.

As outlined above parking and importantly PUDO spaces for the ELC, are provided in accordance with Council controls and is therefore acceptable. However to further improve the existing and future traffic in the vicinity of the school, 5 additional parking spaces are to be provided within Loreto Normanhurst's grounds to the east of the tennis

courts, refer to **Figure 4**. The blue writing on **Figure 4**, indicates the key changes to the parking and traffic arrangements in response to the Panel's comments. The additional parking spaces will help to ensure that parking is contained on site rather than on Osborn Road on Mt Pleasant Ave.

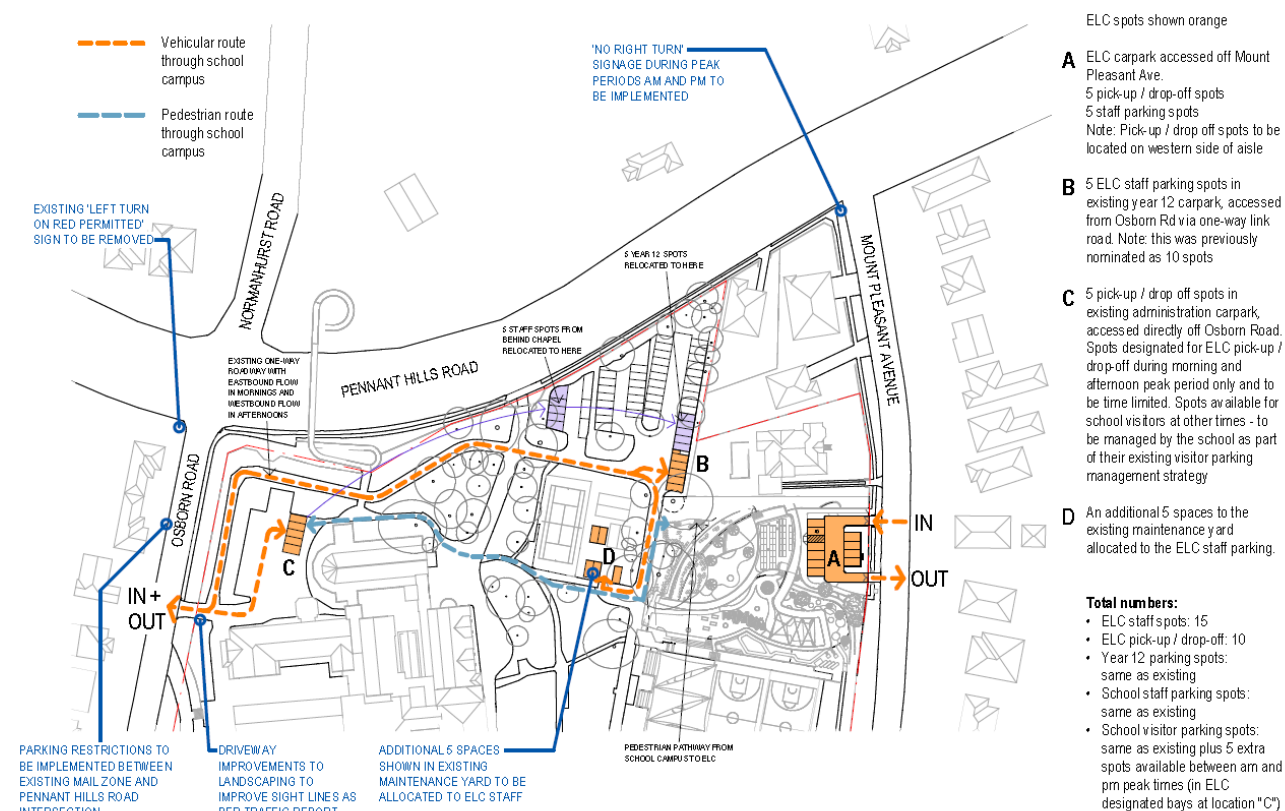


Figure 4 ELC Parking Strategy

7.0 Conclusion

In response to the Panel's meeting on 11 September 2019, and the issues raised regarding the operation of the current school facilities on the road safety and immediately adjoining road network, the applicant undertook drone surveys and road safety audits and proposes the following amendments to the DA including:

- **Improving traffic flow at the Osborn Road traffic signals for vehicles travelling outbound (west)** – through proposing to remove on street parking spaces as shown in **Figure 3**, subject to confirmation by Council.
- **Improvements to pedestrian and traffic safety** – through carrying out the road and traffic safety audit matters upon Loreto land, such as pruning of vegetation. Other methods such as relocating traffic signs, e.g. review of the removal of the left turn on red permitted after stopping at the Osborn Road intersection, re-installment of pavement markings and, repairing potholes on public land need to be confirmed with Council and RMS; and
- **Addressing on-site parking non-compliance** - through the provision of 5 extra on-site parking spaces which are accessed from the Osborn Road driveway and ensures compliance with Council's DCP.

Furthermore, as outlined in the letter and **Appendix A**, the drone surveys demonstrated that the two key intersections assessed currently operate with good LOS and spare capacity, with the exception of the right-turn from Mt Pleasant Ave, which is to be restricted as part of the ELC DA. Therefore, the net increase in traffic generation expected as a result of the ELC (which equates to 20-25 vehicles on Mt Pleasant Ave and Osborn Road) can be accommodated by the existing road network.

We trust that the above information is sufficient to allow the continuing assessment of this DA and respectfully request Council prepare their development assessment report to meet the planning Panel with a recommendation for approval.

Should you have any queries about this matter, please contact me on 02 9956 6962 or bthomas@ethosurban.com.

Yours sincerely,



Belinda Thomas
Principal Planner